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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,672	05/21/2004	James W. Adkisson	BUR920040002US1	3671

23550 7590 05/14/2007
HOFFMAN WARNICK & D'ALESSANDRO, LLC
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EXAMINER

MERANT, GUERRIER

ART UNIT	PAPER NUMBER
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2117

MAIL DATE	DELIVERY MODE
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05/14/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding:

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/709,672

Applicant(s)

ADKISSON ET AL.

Examiner

Guerrier Merant

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 March 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Response to Amendment***

Applicant's arguments filed 03/07/07 with respect to originally presented claims 1-20 have been fully considered but they are not persuasive. The Examiner would like to point out that this action is made final (See MPEP 706.07a).

Response to Arguments

As per claims 1 and 15:

Applicants contend that the prior arts of record fail to teach, "previously studied features", "suspected faulty device features and failures". The examiner respectfully disagrees with Applicants. Morioka et al. teaches a defect location history list (previously studied features - e.g. item 111, fig. 1) which includes defect coordinates and attributions such as defect size, defect category... cluster information (e.g. col. 8, lines 44-52). Furthermore, Morioka et al. teaches comparing an inputted set of suspected faulty device features with previously studied device features (defect location history list, item 111- fig. 1; e.g. col. 9, lines 9-30 & col. 11, lines 17-34).

As per claim 9:

Applicants contend that the prior arts of record fail to teach "simulating the operation of the device; and determining a set of features in the device from the simulation that are potentially causing the failure." The Examiner respectfully disagrees. Morioka et al. clearly teaches the limitation of simulating the operation of the device;

and determining a set of features in the device from the simulation that are potentially causing the failure (e.g. col. 9, lines 9-30 & col. 11, lines 17-34).

Due to the reasons stated above, the Examiner maintains rejections with respect to claims 1-20. Morioka et al. and Gillenwater et al. teach the limitations that the Applicant suggests distinguish from the prior art.

Therefore, the Examiner concludes that claims 1-20 are not patentably distinct or non-obvious over the prior art of record presented.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morioka et al. (US 6,611,728) and further in view of Gillenwater et al. (US 6,557,115).

Claims 1, 9, 10, 15 and 18-20: Morioka et al. substantially teaches a defect table (e.g. *item 111, fig. 1*) that associates previously studied features with known failures (e.g. col. 8, lines 36-62); and a fault isolation system that compares an inputted set of suspected faulty device features with the previously studied features listed in the defect table in order to identify causes of the fail (e.g. col. 9, lines 9-30 & col. 11, lines 17-34). But

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Morioka et al. fails to teach re-using the defected information stored in the defected table to diagnose a failure in an electronic device. However **Gillenwater et al.** teaches a real-time test controller for diagnostic devices during manufacturing processes. The real-time test controller maintains a failure database (item 40, Fig. 2) containing a history of past failures for devices under test and selectively sorts the history for the device to be tested (abstract). Therefore at the time of the invention, one of ordinary skill in the art would have found it obvious to re-use the defected information stored in the defected table of Morioka et al. to diagnose failures occurring in products under test in order to eliminate wasted time in the testing process and to concentrate on known testing difficulties, thereby providing the manufacturer, and ultimately the costumer, with a substantial savings (col. 3, lines 9-16; **Gillenwater et al.**).

Claims 2-6, 8, 11-13 and 17: **Morioka et al.** and **Gillenwater et al.** teach a diagnosis system as in claims 1, 9, and 15 above, wherein the previously studied features are selected from the group consisting of: net names, instance names, cell names, physical attributes, logical attributes, presence of a feature, and absence of a feature (col.20, lines 45-67 & col. 11, lines 14-34; **Morioka et al.**).

Claims 7, 14, and 16: **Morioka et al.** and **Gillenwater et al.** teach a diagnosis system as in claims 1, 9, and 15 above, further comprising a table update system for maintaining and updating the defect table (col. 23, lines 15-26, Fig. 30; **Morioka et al.**).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

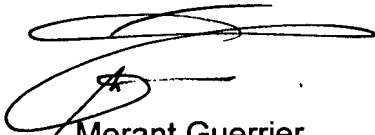
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Exr. Merant Guerrier whose telephone number is (571) 270-1066. The examiner can normally be reached Monday through Thursday from 10:30 a.m. to 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis Jacques, can be reached on (571) 272-6962. Draft or Informal faxes, which will not be entered in the application, may be submitted directly to the examiner at (571) 270-2066.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published

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applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Merant Guerrier
05/08/07



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